

0020

*Internal*  
*c/015/0032* *dk*

**From:** Dana Dean  
**To:** Pam Grubaugh-Littig; Priscilla Burton  
**CC:** Mary Ann Wright  
**Date:** 10/2/2007 4:09 PM  
**Subject:** Re: Crandall drillhole plugging plan

Priscilla,

The logs only give rock types, no correlation to distinct formations. There are several layers that are of a rock type that could be an aquifer, but that is not enough information to suggest that they are aquifers.

I have never worked with the Crandall Canyon Mine plan before, so any information I have comes directly from reading the MRP. According to the MRP the only real aquifer is the Starpoint Sandstone, 50-100' below the coal seam in most areas, and just above the coal seam in the westernmost part of the mine. There are some perched aquifers in the North Horn Formation, but none that we would be able to pin-down in a sealing plan.

From what the MRP says, I don't think that there are any particular aquifers to be aware of in the drilled interval. There is probably some amount of water in the layers that allow water movement, but that will be hit and miss.

Let me know if I can do anything else. Like I say, I just got assigned to Crandall in July and have not reviewed a single amendment for that mine, so I am just going by what the MRP says.

Thanks,  
Dana

>>> Priscilla Burton 10/2/2007 3:04 PM >>>

Dave Shaver said he dropped off e-logs to you yesterday and spoke with you both about them. He said that the log is about 10 feet long and difficult to scan!

Can you tell me the approximate depth to the water resource based on the logs? Or the depth to the formations that hold the aquifer? I would like to have some idea of that depth, before I observe the plugging tomorrow.

Thanks.